DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002722 Address: 333 Burma Road **Date Inspected:** 26-May-2008

City: Oakland, CA 94607

OSM Arrival Time: 2300 **Project Name:** SAS Superstructure **OSM Departure Time:** 730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Jiang Jian Fei, An Qing Xzang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

Bridge No: 34-0006 **Component:** Caltrans OBG, Tower

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Ken Jobes, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, to randomly monitor welding and Quality Control (QC) functions. While on site, the QA Inspector observed and/or discovered the following:

New Tower Bay 2

The Caltrans QA Inspector randomly observed the fitting and tack welding of Weld No. ESD1-SA80 B/E-14 using 5.0 mm E7018 shielded metal arc welding (SMAW) electrodes. Two welders were working on this joint, Yang Lei (I. D. No. 040690) and Liu Wei (I. D. No. 048532). Certified Welding Inspector (CWI), Jiang Jian Fei (CWI No. 07120691) was present during this welding as was ABF QA Inspector, Yang Yiheng. The QA Inspector verified the qualifications of the welders. The Caltrans QA Inspector observed that two portable electrode heating ovens were in use and operable and that preheat was being administered.

New Tower Bay 1

The Caltrans QA Inspector randomly observed the Submerged Arc Welding (SAW) of fill passes on Weld Nos. ESD1-SA173 J/K-6 and 9B; and Weld Nos. ESD1-SA173 K/K-6, 13B, 4, 12B, 11B and 2. All eight welds are on the same joint and appear to be numbered as such because they alternate partial joint penetration (PJP) and complete joint penetration (CJP) along the joint. The "B" welds are CJP and the welds without a letter designation are PJP. The welding operator was Xu Yan (I. D. No. 052917). The welding was in the flat groove (1G) position using Welding Procedure Specification (WPS) Nos. WPS-B-T-2221-B-U3c-S for the CJP; and

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WPS-B-T-2221-B-P3-S for the PJP. Certified Welding Inspector (CWI), An Qing Xzang (CWI No. 07120691) was present during this welding as was ABF QA Inspector, Xie Yan.

All above observations appeared to meet the requirements of the job specifications.



Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Jobes, Kenneth	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer